

WO 98/40747

PCT/CA98/00180

1/21

FIGURE 1

LOCUS HSTGFB3M 2574 bp RNA PRI 12-SEP-1993
DEFINITION Human mRNA for transforming growth factor-beta 3 (TGF-beta 3).
ACCESSION X14149
NID g37095
KEYWORDS growth factor; transforming growth factor; transforming growth factor-beta 3.
SOURCE human.
ORGANISM Homo sapiens
Eukaryotae; mitochondrial eukaryotes; Metazoa; Chordata; Vertebrata; Eutheria; Primates; Catarrhini; Hominidae;
Homo.
REFERENCE 1 (bases 1 to 2574)
AUTHORS Chen, E.Y.
TITLE Direct Submission
JOURNAL Submitted (23-MAR-1989) Chen E.Y., Genentech Inc., 460 Pt. San Bruno Blvd., San Francisco, CA 94080, USA
REFERENCE 2 (bases 1 to 2574)
AUTHORS Derynck, R., Lindquist, P.B., Lee, A., Wen, D., Tamm, J., Graycar, J.L., Rhee, L., Mason, A.J., Miller, D.A., Coffey, R.J., Moses, H.L. and Chen, E.Y.
TITLE A new type of transforming growth factor-beta, TGF-beta 3
JOURNAL EMBO J. 7 (12), 3737-3743 (1988)
MEDLINE 89091120
COMMENT See <J03241> for alternative sequence of TGF-beta 3.
FEATURES
source Location/Qualifiers
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/cell_line="A172 glioblastoma"
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CDS 254..1492
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/db_xref="SWISS-PROT:P10600"
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BASE COUNT 629 a 680 c 666 g 599 t

2/21

FIGURE 1 (cont'd)

ORIGIN

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121 caccttcttg ccaagcctca gtcttttgga tctggggagg ccgcctgggt ttcctccctc
181 cttctgcacg tctgctgggg tctcttcttc tccaggcctt gccgtccccc tggcctctct
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301 ctttgccacg gtcagcctct ctctgtccac ttgcaccacc ttggacttcg gccacatcaa
361 gaagaagagg gtggaagcca ttaggggaca gatcttgagc aagctcaggc tcaccagccc
421 ccctgagcca acggtgatga cccacgtccc ctatcaggtc ctggcccttt acaacagcac
481 ccgggagctg ctggaggaga tgcattggga gagggaggaa ggctgcaccc aggaaaacac
541 cgagtcggaa tactatgcca aagaaatcca taaattcgac atgatccagg ggctggcgga
601 gcacaacgaa ctggctgtct gccctaaagg aattacctcc aaggttttcc gcttcaatgt
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961 agatattcctg gaaaacattc acgaggtgat ggaaatcaaa ttcaaaggcg tggacaatga
1021 ggatgaccat ggccgtggag atctggggcg cctcaagaag cagaaggatc accacaaccc
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2161 gaaagggttg aaatcaaccc tctcctgtct gccctctggg tccctcctct cacctctccc
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2461 agtatgaata ttactctcaa aatctttgta taaataaata tttttggggc atcctgggat
2521 atttcatctt ctggaatatt gtttctagaa cagtaaaagc cttattctaa ggtg

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WO 98/40747

PCT/CA98/00180

3/21

FIGURE 2

LOCUS HSU22431 3678 bp mRNA PRI 28-JUN-1995
DEFINITION Human hypoxia-inducible factor 1 alpha (HIF-1 alpha) mRNA, complete cds.
ACCESSION U22431
NID g881345
KEYWORDS
SOURCE human.
ORGANISM Homo sapiens
Eukaryotae; mitochondrial eukaryotes; Metazoa; Chordata; Vertebrata; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 3678)
AUTHORS Wang, G.L., Jiang, B.H., Rue, E.A. and Semenza, G.L.
TITLE Hypoxia-inducible factor 1 is a basic-helix-loop-helix-PAS heterodimer regulated by cellular O2 tension
JOURNAL Proc. Natl. Acad. Sci. U.S.A. 92 (12), 5510-5514 (1995)
MEDLINE 95296340
REFERENCE 2 (bases 1 to 3678)
AUTHORS Wang, G.L., Jiang, B.-H., Rue, E.A. and Semenza, G.L.
TITLE Direct Submission
JOURNAL Submitted (09-MAR-1995) Gregg L. Semenza, Center for Medical Genetics, The Johns Hopkins University School of Medicine, 600 N. Wolfe St., Baltimore, MD 21287-3914, USA
FEATURES
source Location/Qualifiers
1..3678
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/db_xref="taxon:9606"
/cell_line="Hep3B"
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gene 29..2509
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CDS 29..2509
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/note="basic helix-loop-helix transcription factor"
/codon_start=1
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SSPEPNPSEYCFYVDSMDVNEFKLELVEKLFAEDTEAKNPFSTQDTDLLEMLAPYI
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KTVTKDRMEDIKILIASPSPTHIHKETTSATSSPYRDTQSRTASPNRAGKGVIEQTEK
SHPRSPNVLSVALSQRRTTVPEELNPKILALQNAQRKRKMEHDGSLFQAVGIGTLLQQ
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BASE COUNT 1197 a 695 c 675 g 1111 t

4/21

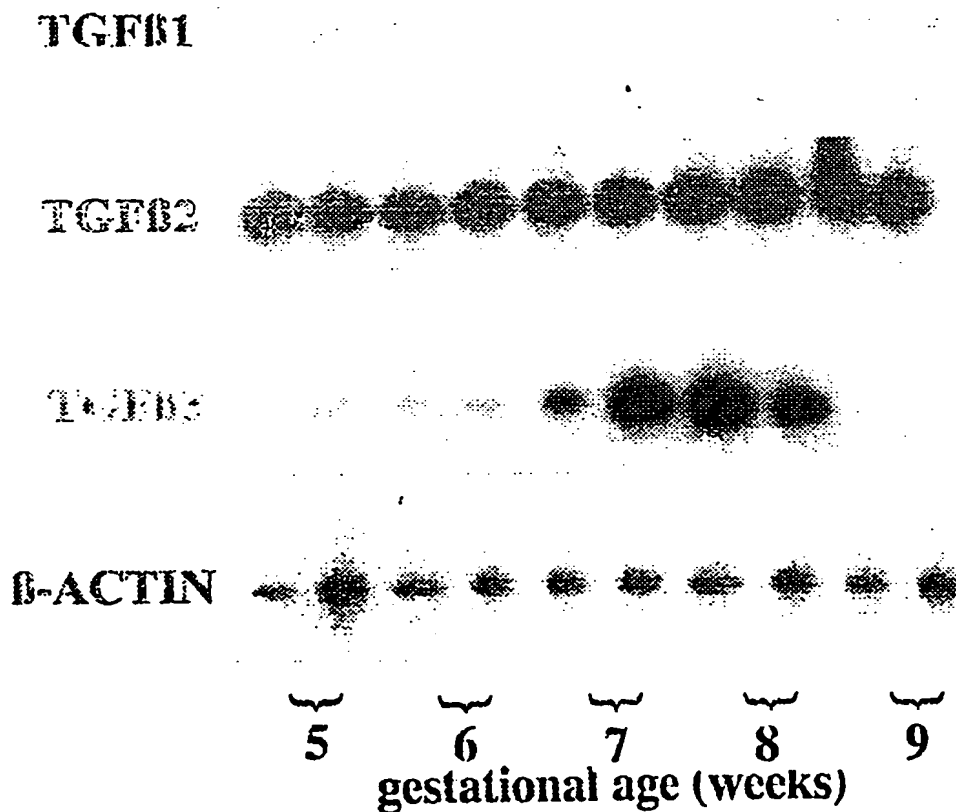
FIGURE 2 (cont'd)

ORIGIN

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421	tgtgtttgat	tttactcatc	catgtgacca	tgaggaaatg	agagaaatgc	ttacacacag
481	aaatggcctt	gtgaaaaagg	gtaaaagaaca	aaacacacag	cgaagctttt	ttctcagaat
541	gaagtgtacc	ctaactagcc	gaggaagaac	tatgaacata	aagtctgcaa	catggaaggt
601	attgcactgc	acaggccaca	ttcacgtata	tgataccaac	agtaaccaac	ctcagtggtg
661	gtataagaaa	ccacctatga	cctgcttggt	gctgatttgt	gaacccattc	ctcaccatc
721	aaatattgaa	attccttttag	atagcaagac	tttctcagt	cgacacagcc	tggatatgaa
781	attttcttat	tgtgatgaaa	gaattaccga	attgatggga	tatgagccag	aagaactttt
841	aggccgctca	atttatgaat	attatcatgc	tttgactct	gatcatctga	ccaaaactca
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961	aggtggatat	gtctgggttg	aaactcaagc	aactgtcata	tataacacca	agaattctca
1021	accacagtgc	attgtatgtg	tgaattacgt	tgtgagtgg	attattcagc	acgacttgat
1081	tttctccctt	caacaaacag	aattgtctct	taaaaccggt	gaatcttcag	atatgaaaat
1141	gactcagcta	ttcaccaaaq	ttgaatcaga	agatacaagt	agcctctttg	acaaacttaa
1201	gaaggaacct	gatgctttaa	ccttgctggc	cccagccgct	ggagacacaa	tcatatcttt
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1321	taatgatgta	atgctccctt	cacccaacga	aaaattacag	aatataaatt	tggcaatgtc
1381	tccattaccc	accgctgaaa	cgccaaagcc	acttcgaagt	agtgtctgac	ctgcactcaa
1441	tcaagaagtt	gcattaaaaat	tagaaccaaa	tccagagtca	ctggaacttt	cttttaccat
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1921	tatggaagac	attaaaaatat	tgattgcac	tccatctcct	acccacatac	ataaagaaac
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2461	cctactgcag	ggtgaagaat	tactcagagc	tttgatcaa	gttaactgag	ctttttctta
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2581	ctacatctaa	tttttagaagc	ctggctacaa	tactgcacaa	acttggttag	ttcaattttt
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2761	atttttaaaaa	atgcaccttt	ttattttatt	atttttggct	agggagttta	ttcctttttc
2821	gaattatttt	taagaagatg	ccaatataat	ttttgtaaga	aggcagtaac	ctttcatcat
2881	gatcataggc	agttgaaaaa	tttttacacc	ttttttttca	cattttacat	aaataataat
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3241	tctgatgttt	ctatagtcac	tttgccagct	caaaagaaaa	caactaccta	tgtagttgtg
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3361	gtataaagat	attttgagca	gactgtaaac	aagaaaaaaa	aaatcatgca	ttcttagcaa
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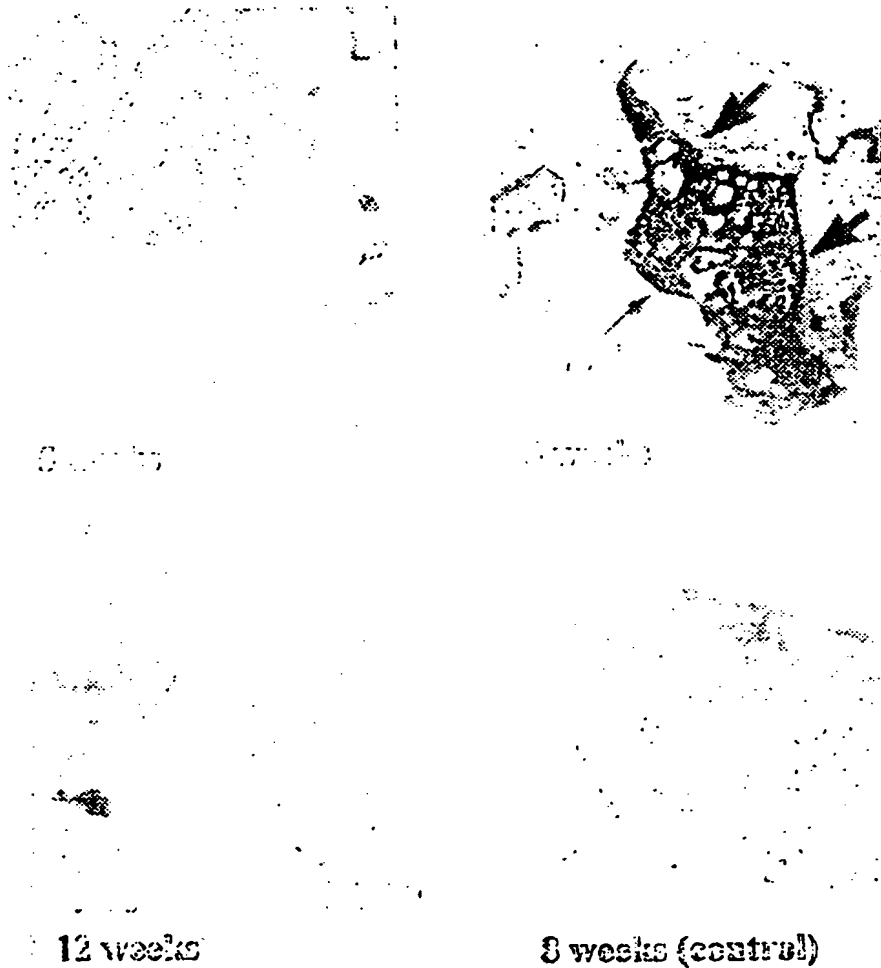
5/21

FIGURE 3A



6/21

FIGURE 3B

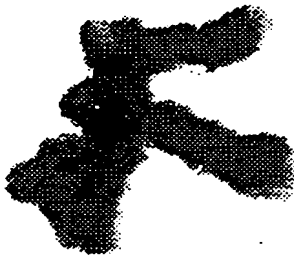


10028158-122001

7/21

FIGURE 4A

CONTROL



AS-B3



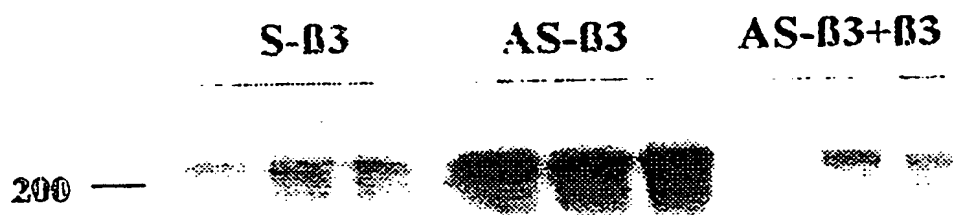
AS-B3+B3



10028158 122001

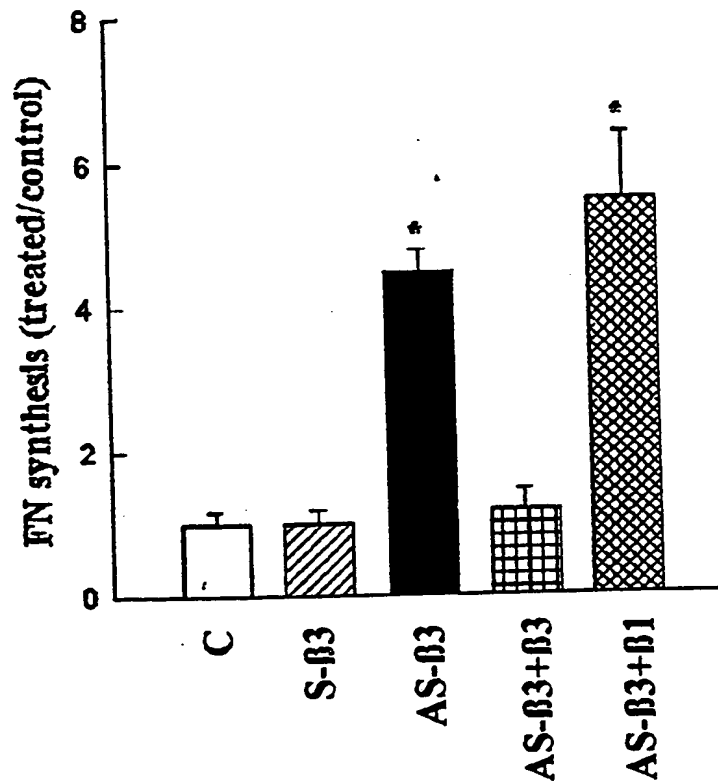
8/21

FIGURE 4B



9/21

FIGURE 4C

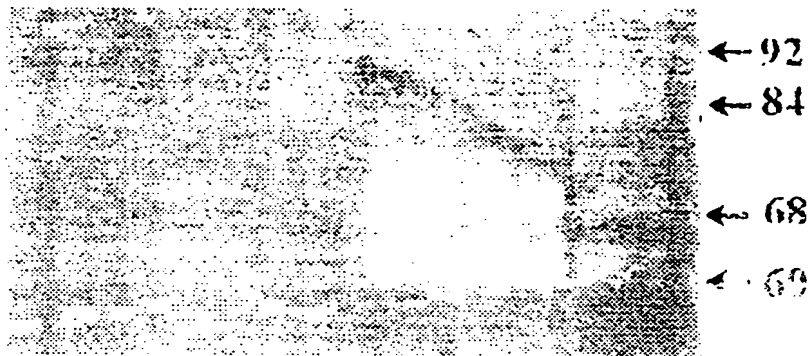


10/21

FIGURE 4D

S-B3

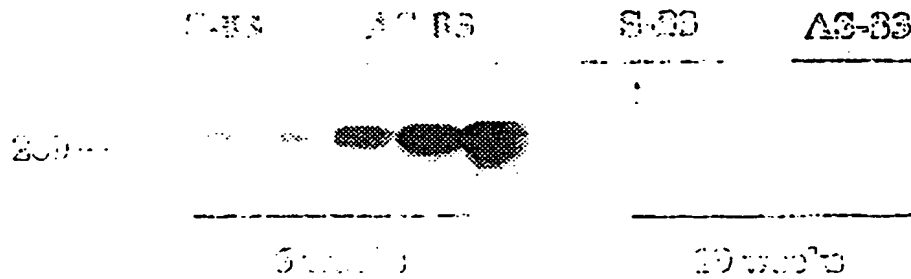
AS-B3



10028158-122001

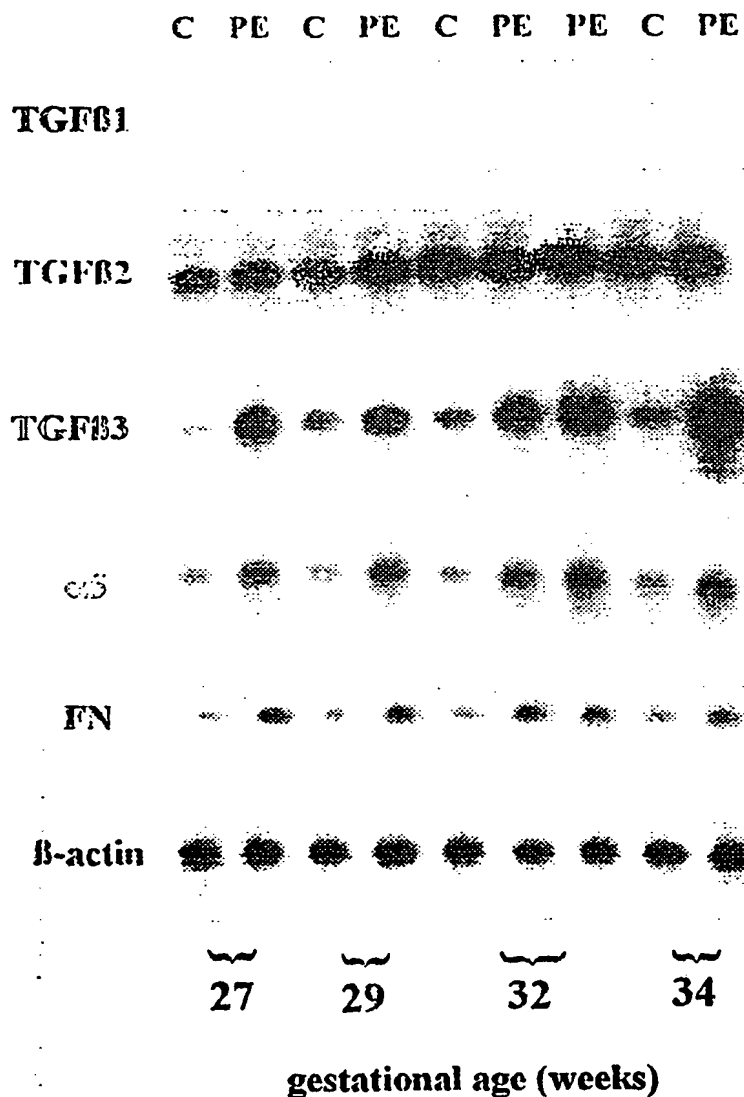
11/21

FIGURE 4E



12/21

FIGURE 5A



10028158-122001

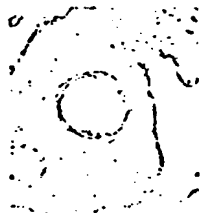
13/21

FIGURE 5B

Normal Placenta

Preeclamptic Placenta

29 weeks



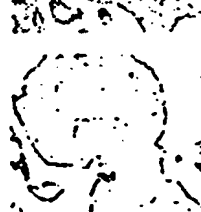
31 weeks



33 weeks



control



10028158-122001

14/21

FOOTESTEST

FIGURE 6A

Preeclamptic placenta



AS-B3

S-B3

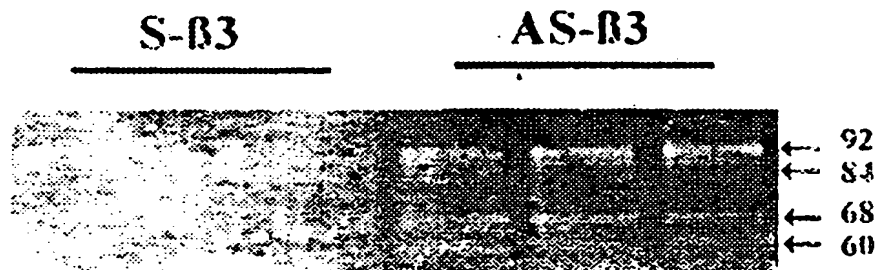
Normal placenta



S-B3

15/21

FIGURE 6B



16/21

FIGURE 6C

S-B3

AS-B3



10028158-122001

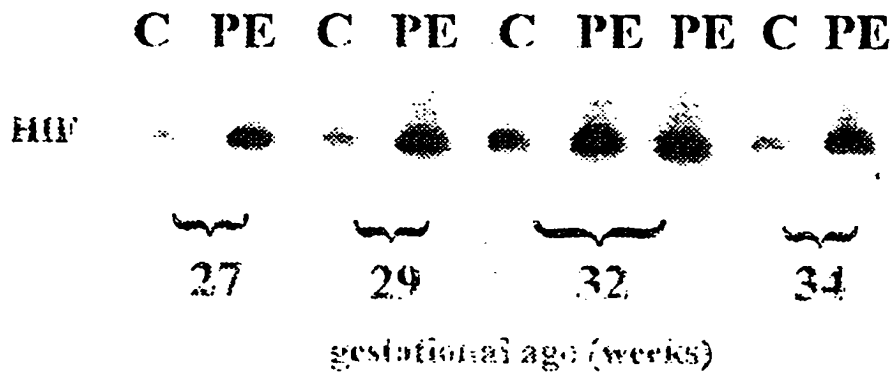
17/21

FIGURE 7A

10028158-122001

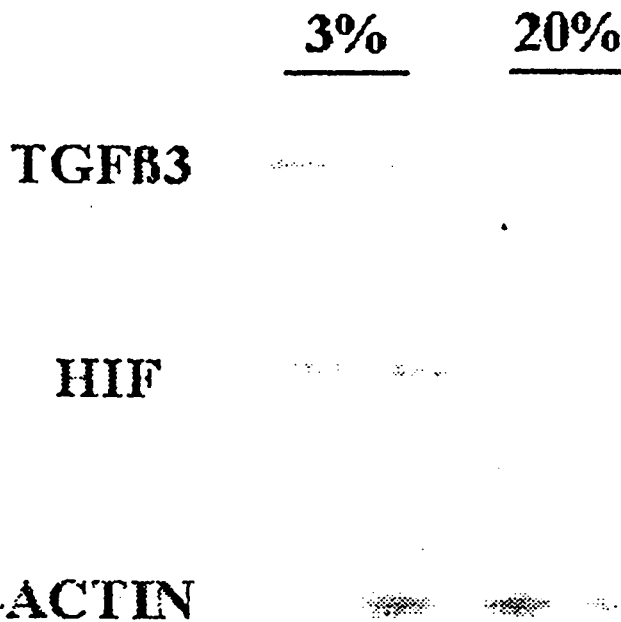
18/21

FIGURE 7B



19/21

FIGURE 8



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20/21

FIGURE 9

20% O₂



25X



50X

3% O₂



25X



50X

10026158-122001

21/21

FIGURE 10

S-HIF



20X

AS-HIF



20X

AS-HIF



40X

AS-HIF



40X

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